

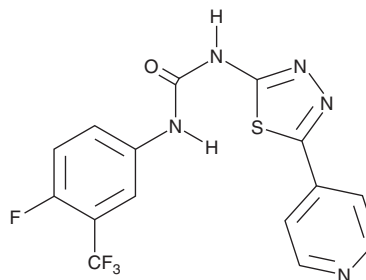
PRODUCT INFORMATION



ML-216

Item No. 15186

CAS Registry No.: 1430213-30-1
Formal Name: N-[4-fluoro-3-(trifluoromethyl)phenyl]-N'-[5-(4-pyridinyl)-1,3,4-thiadiazol-2-yl]-urea
Synonym: CID-49852229
MF: C₁₅H₉F₄N₅OS
FW: 383.3
Purity: ≥98%
UV/Vis.: λ_{max}: 242, 300 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ML-216 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-216 in the solvent of choice, which should be purged with an inert gas. ML-216 is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

Description

Bloom (BLM) helicase is a DNA unwinding enzyme important for DNA repair in the homologous recombination pathway. Mutations of the BLM gene result in reduced BLM helicase activity that is associated with the rare genetic disorder, Bloom's Syndrome, and a predisposition to developing cancer. ML-216 is the first identified small molecule inhibitor of BLM helicase (IC₅₀ = 1.8 μM) that is 28-fold selective against the related helicases RECQ1, RECQ5, and *E. coli* UvrD (IC₅₀ ≥ 50 μM).¹ At 25-50 μM, ML-216 has been shown to dose-dependently inhibit the proliferation of BLM-expressing PSNF5 fibroblast cells but not BLM-deficient PSNG13 fibroblast cells.¹

Reference

1. Rosenthal, A.S., Dexheimer, T.S., Nguyen, G., *et al.* Discovery of ML216, a small molecule inhibitor of bloom (BLM) helicase, in *Probe Reports from the NIH Molecular Libraries Program*,1 (2011).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/07/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM